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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,806	07/20/2004	Detlev Neuland	02/003 LTS	4939

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EXAMINER

MAZUMDAR, SONYA

ART UNIT PAPER NUMBER

1734

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/501,806	Applicant(s) NEULAND ET AL.	
	Examiner Sonya Mazumdar	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,10-17,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

1. Amendments made to the claims, see pages 10 through 12 of remarks filed on June 21, 2006, are noted.
2. Amendments made to the specification, see page 9 of remarks filed on June 21, 2006, are noted.

Response to Arguments

3. Applicant's amendments, see pages 13 and 14, filed June 21, 2006, with respect to the specification have been fully considered, and the objection has been withdrawn.
4. Applicant's arguments, see pages 13 and 14, filed June 21, 2006, with respect to the drawings have been fully considered, and the objection has been withdrawn.
5. Applicant's amendments, see page 15, filed June 21, 2006, with respect to the rejection of claims 1 through 16 under 35 USC 112, 1st paragraph, have been fully considered, and the rejection has been withdrawn.
6. Applicant's amendments, see pages 15 and 16, filed June 21, 2006, with respect to the rejection of claims 1 through 16 under 35 USC 112, 2nd paragraph, have been fully considered, and the rejection has been withdrawn.
7. Applicant's arguments with respect to claims 1 through 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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9. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2 of claim 19, it is unclear as to what is defined as an "optional additive".

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 17 is rejected under 35 U.S.C. 102(b) as being unpatentable by Storti (US 3,518,152).

Storti teaches an apparatus to produce laminates comprising a transfer web (78), a coating station (70) for coating the transfer web, a drying chamber (80) to heat and dry the coating on the web, a laminating station (90, 91) where a fabric web is applied onto the coated face of the transfer web, rolls (77, 97) to separate the transfer web from the fabric, and an endless belt which the transfer web revolves around (Figure 2).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 2, 3, 4, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (US 3,859,157) in view of Benson et al. (US 4,913,760)

With respect to claim 1, Morgan teaches making a laminate by applying a release coating onto a paper backing. The composite is dried and then exposed to humid air to rehumidify the paper and stabilize it at about 50 percent relative humidity (column 2, line 65 – column 3, line 12). A sheet is applied onto the humidified paper backing, and the paper backing is removed thereafter (column 3, lines 26-49).

Morgan does not specifically teach winding up and storing the coated product nor using a reusable backing. Benson et al. teach winding up and storing a coated

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permanent carrier, where a temporary carrier, that was used to transfer the coating to the permanent carrier, is recycled thereafter (column 6, lines 33-34; column 8, lines 7-11).

It would have been obvious for Morgan to wind up and store the coated substrate as Benson et al. taught and would have been motivated to do so for later use of the coated substrate product.

With respect to claims 2 and 11, Morgan does not teach using a backing other than paper. Benson et al. teach using a permanent carrier and temporary carrier made of a thermoplastic comprising polymer blends (column 3, lines 60-67; column 8, lines 18-54).

It would have been obvious for Benson et al. to teach using other carrier materials as taught by Benson and would have been motivated to do so to have a durable heat resistant backing (column 4, lines 1-2) and a flexible, stretchable sheet to be coated.

With respect to claim 3, Morgan teaches using a backing of a uniform thickness before processing (Figure 1).

With respect to claim 4, Morgan teaches applying a coating in an aqueous medium with a silicone base composition (column 3, lines 2-3; column 4, line 34).

With respect to claim 10, Morgan teaches applying a sheet with adhesive onto the humidified paper backing (column 3, lines 29-30).

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Benson et al. as applied to claim 1, and further in view of Tsukamoto et al. (US 5,006,189)

The teachings of claim 1 are as described above.

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Although Benson et al. teaches applying a coating that is 0.13 mm thick (130 micrometers) (column 11, lines 62-64), Morgan in view of Benson et al. does not teach coating by a casting method or a reverse coating method. Tsukamoto et al. teach applying coating to the transfer sheet by a casting method in a thickness of 10 μ m (column 4, line 45).

It would have been obvious for Morgan in view of Benson et al. to teach coating in a manner Tsukamoto et al. did and would have been motivated to do so for applying coatings of uniform thickness that an extruder may lack in doing.

15. Claims 7, 8, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Benson et al. as applied to claim 1 above, and further in view of Storti.

The teachings of claim 1 are as described above.

With respect to claims 7 and 8, Morgan in view of Benson et al. do not teach drying a coated backing in a hot air chamber at a specific temperature. Storti teaches passing a coated endless belt (78) through a heated drying chamber set at a temperature between 140-200°F (60-93°C) (column 3, lines 45-50; column 5, lines 39-49; Figure 2).

It would have been obvious for Morgan in view of Benson et al. to teach a hot air chamber for drying the coated backing as Storti taught and would have been motivated to do so to obtain a tacky coating on the backing in an uncured state, which cannot be obtained at room temperature (column 5, lines 29-39).

With respect to claims 12 and 15, Morgan in view of Benson et al. do not teach a backing that is regenerated at a station after separation from another sheet. Storti

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teaches passing an endless belt (78) that transfers coating to a fabric web, separates from the web, and re-circulates to be coated again (Figure 2).

It would have been obvious for Morgan in view of Benson et al. to teach a hot air chamber for drying the coated backing as Storti taught and would have been motivated to do so to reduce waste of a transfer backing.

16. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Benson et al. as applied to claim 12, and further in view of Harmon et al. (US 2,820,716).

The teachings of claim 12 are as described above.

Morgan in view of Benson et al. do not teach using a means for removal of adhering foreign particles from the transfer sheet and vacuum cleaning the transfer support web after separation from a substrate. Harmon et al. teaches using a vacuum duct containing rotating brushes for cleaning excess particles left from a thermoplastic particle distribution drum (column 6, lines 13-16; Figure 3).

It would have been obvious for Morgan in view of Benson et al. to include a means for removal of adhering foreign particles from the transfer sheet and vacuum cleaning the transfer sheet as Harmon et al. taught, and would have been motivated to do so to have a clean and residue-free transfer sheet before being coated again for the following transfer to the substrate.

17. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Benson et al. and Harmon et al. as applied to claim 13, and even further in view of Smith (US 6,090,238).

The teachings of claim 13 are as described above.

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The combined teachings of Morgan, Benson et al., and Harmon et al. do not teach decontaminating the transfer sheet after separation from a substrate. Smith teaches removing adhesive coating from a substrate surface, and further removing adhesive residue by delivering water and an organic solvent to a substrate surface (column 2, lines 1-20; column 4, line 2-17; column 5, lines 44-45).

It would have been obvious for Morgan in view of Benson et al. and Harmon et al. to decontaminate the transfer sheet after separation from a substrate as Smith taught. Tsukamoto et al. in view of Parker et al. would have been motivated to do so to have a clean and residue-free transfer sheet before being coated again for the following transfer to the substrate.

18. Claims 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Benson et al. and Storti as applied to claims 1 and 12 above, and further in view of Parker et al. (US 4,473,422)

The teachings of claims 1 and 12 are as described above.

With respect to claim 16, although Benson et al. teach recycling a temporary carrier for a laminate, Morgan in view of Benson et al. and Storti do not specifically teach winding a temporary carrier after transfer of a coating. Parker et al. teach stripping away a carrier film (12), storing the film in a roll, and later retrieving the film for reuse (column 10, lines 32-34; Figure 1).

It would have been obvious for Morgan in view of Benson et al. and Storti to wind and store a backing as Parker et al. taught and would have been motivated to do so as another means of reducing waste of backing if one cannot provide an endless belt as a transfer web.

With respect to claims 19 and 20, Morgan in view of Benson et al. do not teach coating with a material that consists of an organic raw material and optional additives. Parker et al. teach coating with polyvinyl alcohol or polyvinyl acetate, and a catalyst if desired (column 3, lines 39-46).

It would have been obvious for Morgan in view of Benson et al. to teach such a coating as Parker et al. taught and would have been motivated to do facilitate later printing and embossing of a product without the development of undesirable surface irregularities such as cracking (column 3, lines 55-59).

Allowable Subject Matter

19. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SM



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SUPERVISORY PATENT EXAMINER

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